IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

i4i LIMITED PARTNERSHIP and INFRASTRUCTURES FOR INFORMATION INC.,	§ § § §	
Plaintiffs,	§ §	**CIVIL ACTION NO. 6:07-CV-113 LED**
v.	§ §	
MICROSOFT CORPORATION,	§ §	
Defendant.	§	

MICROSOFT'S MOTION FOR JUDGMENT AS A MATTER OF LAW ON NONINFRINGEMENT OF CLAIMS 14, 18 AND 20 OF THE PATENT-IN-SUIT AND ALTERNATIVE MOTION FOR NEW TRIAL

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I.   INTRODUCTION AND SUMMARY OF ARGUMENT

Pursuant to FED. R. CIV. P. 50(b), Microsoft Corporation respectfully renews its motion

for judgment as a matter of law that no reasonable jury could find that Microsoft infringes claims

14, 18 or 20 of the patent-in-suit (U.S. Patent No. 5,787,449).[1]

Although i4i managed to induce a favorable jury verdict with a "David vs. Goliath" plea

to the jury—pieced together with out-of-context snippets from irrelevant emails—i4i failed to

meet the requirements of actually proving infringement. i4i's predominantly emotional approach

was exemplified by i4i's closing argument. After defending the lies of its founder and primary

named inventor, i4i devoted barely a moment to the technical elements of infringement. Instead,

i4i devoted the bulk of its argument to the unfounded assertions that Microsoft spurned i4i's

sales overtures and then simply "took" i4i's invention. Indeed, although i4i expressly disclaimed

any allegations of "copying," that was exactly the case that i4i presented to the jury.

Stripped of emotional rhetoric, however, i4i's infringement theory falls completely flat.

In particular, i4i's infringement claims must fail as a matter of law because: (1) i4i did not

present legally sufficient evidence for the jury to find infringement of the "metacode map"

limitation as construed by the Court, either literally or under the doctrine of equivalents; and

(2) the jury was instructed on an improper construction of several claim limitations that, if

construed properly, cannot support a verdict of infringement as a matter of law. At a minimum,

the errors in claim construction warrant a new trial.

A fundamental limitation of the invention purportedly disclosed and recited in all of the

asserted claims of the '449 patent is a "**metacode map**," which this Court has construed as "**a**

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[1] Microsoft's present motion is limited to the technical aspects of infringement—that is, whether use of the accused functionality in Word 2003 and Word 2007, by anyone, can satisfy the claim limitations. Microsoft moves separately for judgment as a matter of law, or alternatively, a new trial, regarding i4i's failure to adduce sufficient evidence to support a finding that Microsoft engaged in acts of induced or contributory infringement, and also moves separately for the same relief on the issue of willful infringement.

data structure that **contains a plurality of metacodes and their addresses of use corresponding to a mapped content**." [Dkt. No. 111 at 31 (App. B) (emph. added)] Within this Court's construction are <u>two key requirements</u>:   (1) that the metacode map be "a data structure"; and (2) that the metacode map actually "contain[] a plurality of metacodes." [*Id.*] i4i failed to introduce sufficient documentary or testimonial evidence to provide a basis for a reasonable jury to find that either one of these requirements is met by use of the accused functionality in Word 2003 or Word 2007. In fact, the evidentiary record compels the opposite conclusion, and the jury's verdict of infringement should be set aside.

Turning first to the requirement of "**a data structure**"—this issue was hotly disputed by the parties during claim construction. The Court ultimately rejected i4i's contention that a "metacode map" is not an actual data structure, and included that requirement expressly into its construction. [Dkt. No. 111] As a result, i4i's designated technical expert, Dr. Rhyne, was forced to take illogical and extreme positions at trial in his attempt to support i4i's infringement theories—positions that in some instances did not even correlate to Dr. Rhyne's earlier reports. Specifically, Dr. Rhyne could not identify any "data structure" as the metacode map purportedly created by the accused functionality in Word 2003 or Word 2007; instead, Dr. Rhyne was forced to aggregate several disparate data structures, which he simply declared to be "related" and therefore a "metacode map." [Trial Tr. (5/12/09 p.m.) at 101, 106-107 (Rhyne)] Dr. Rhyne's imaginary aggregation cannot be "a data structure" because it is plainly inconsistent with the teachings of the patent and the Court's claim construction.   [Trial Tr. (5/18/09 p.m.) at 97-99, 103 (Gray)] It is not even internally consistent, as Dr. Rhyne's aggregation illogically excludes some structures (such as those containing content), even though such structures are just as "related" as the various other structures Dr. Rhyne chose to include. The reason for i4i's selective aggregation of only some of the "related" data structures is simple—applying Dr.

Rhyne's reasoning consistently and to its logical limits would require combining structures containing the content into the "metacode map"—defying the fundamental requirement in the patent and asserted claims that the "metacode map" be separate from the mapped content. Dr. Rhyne tacitly recognized this pitfall, but provided no principled basis for any reasonable jury to only include some structures, while disregarding others, in his aggregate "metacode map."

Dr. Rhyne's opinion that the metacode map allegedly created by the accused functionality also "contains metacodes" is just as untenable. As construed by the Court, a "**metacode**" is an **"individual instruction which controls the interpretation of the content of the data.**" [Dkt. No. 111] The dispute at trial centered on whether a "metacode" is a "tag" or just the "tag name" (the "tag" without the necessary delimiters). i4i's attempt to expand the Court's construction of a "metacode" to cover just a "tag name" defied not only the Court's construction of "metacodes," as well as the usage of that term in the SGML and XML standards, but defied Dr. Rhyne's own pre-trial opinions. Specifically, Dr. Rhyne admitted that his usage of the term "metacode" at trial as limited to "tag names" contradicted his usage in his pre-trial expert reports, which equated "metacodes" with "tags."[2] Dr. Rhyne's pretrial usage was the correct one. A "metacode" is also referred to in the patent as a "start tag" or an "end tag," which even Dr. Rhyne agreed must include not only the name of the metacode, but must also include the <u>necessary delimiters,</u> which differentiate a metacode from plain text.[3] [Trial Tr. (5/13/09 a.m.) at 47, 53-54 (Rhyne)]

The parties' dispute was material because it was undisputed that Word 2003 and 2007 do not include delimiters in the various structures that i4i asserted to be a metacode map; therefore,

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[2] *See* Trial Tr. (5/13/09 a.m.) at 53-54 (Rhyne): "Q: So there you're specifically saying that tags are metacodes. A. I certainly said that." (Referring to Rhyne Dec. 8, 2008 Report at p. 8.)

[3] For example, a metacode for a "paragraph" might be represented as **<para>**, as it is in the '449 patent. [PX-001; Trial Tr. (5/13/09 a.m.) at 60 (Rhyne); Trial Tr. (5/15/09 p.m.) at 61-62 (Vulpe)]

use of Word 2003 and 2007 cannot satisfy any of the claim limitations requiring a "map of metacodes."[4] Dr. Rhyne agreed, in fact, that if his narrow view of "metacode"—as being merely the "tag names," and not the entire "tag," including delimiters—was rejected, then the jury should also reject a finding of infringement of this limitation. [Trial Tr. (5/13/09 a.m.) at 144 (Rhyne); *see also id.* at 40 ("If the jury were to decide or the Court were to direct that the metacode had to have those little symbols, then, literally, they are not there.") (Rhyne)] Because Dr. Rhyne's view of "metacode" is insupportable as a matter of law, no reasonable jury could have found infringement. The jury's verdict of infringement should be set aside, and i4i's infringement claims should be rejected as a matter of law.

i4i resorted to the doctrine of equivalents at trial only with regard to the "metacode map" limitation, and specifically only with respect to the "data structure" aspect. Relying exclusively on the very conclusory testimony of Dr. Rhyne, i4i argued that Word 2003 and Word 2007 meet this limitation equivalently because the seven (or eight) different data structures in Word 2003 and 2007 are "equivalent" to "a data structure." [Trial Tr. (5/12/09 p.m.) at 160-62 (Rhyne)] The conclusory testimony of i4i's expert was manifestly insufficient to provide the particularized testimony and linking argument that the Federal Circuit requires, and the jury's verdict cannot be sustained on this basis.

The foregoing issues are premised on this Court's claim construction—that is, even if this Court's claim construction were accepted, the verdict of infringement cannot stand. The jury's verdict should also be overturned because it is premised on an incorrect construction of several terms: (a) the terms "distinct map storage means" and "mapped content storage means" (or "mapped content storage," as in claim 20) should be construed to require the ability to

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[4] This requirement is stated in the preambles of claims 14 and 20 (which i4i did not dispute limit the claimed invention) as well as in the bodies of claims 14 and 20, stated variously as a "map of [the] metacodes" or a "metacode map."

independently manipulate the metacode map and mapped content; (b) the same terms should

also be construed to require **persistently storing** the metacode map and the mapped content

separately from each other;[5] and (c) the claims should also be construed as requiring that the

metacodes be **separated out** from the mapped content. If these errors in claim construction were

corrected, no reasonable juror could find infringement of the asserted claims. At a minimum, a

new trial would be required.

The bottom line is that i4i's infringement case had little to do with the technical

requirements of infringement. This Court should exercise its power and its duty to set aside an

obviously emotion-inflamed verdict, which cannot be upheld without stretching the claims of the

'449 patent well past the breaking point.[6] This Court should enter judgment as a matter of law in

favor of Microsoft. In the alternative, it should grant a new trial.

II.   APPLICABLE LAW

A.   Standards for Judgment as a Matter of Law Under FED. R. CIV. P. 50(b)

Rule 50(b) of the Federal Rules of Civil Procedure provides that where, "for any reason,"

the court does not grant a party's motion for judgment as a matter of law challenging the

sufficiency of the evidence prior to submission of the case to the jury, the party may renew its

request after judgment, and the party is entitled to judgment as a matter of law on its renewed

motion where the evidence is legally insufficient to support an adverse jury verdict. FED. R. CIV.

P. 50(b); *Unitherm Food Sys., Inc. v. Swift-Eckrich, Inc.*, 546 U.S. 394, 400-01 (2006).

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[5] The notion of "persistently storing" is also in the "compiling" step of claim 14.

[6] As Microsoft has also pointed out in its co-pending motion regarding Word 5/6, i4i's broad reading of
its asserted claims inescapably requires reading those claims on Microsoft's own prior art products, which
i4i admits were sold years before the '449 patent was filed. By necessarily implicating the prior art Word
5/6 software, i4i's infringement allegations thus violate the century-old maxim of "that which infringes, if
later, would anticipate, if earlier. *See, e.g.*, *Upsher-Smith Labs. v. Pamlab, L.L.C.*, 412 F.3d 1319, 1322
(Fed. Cir. 2005) ("A century-old axiom of patent law holds that a product 'which would literally
infringe if later in time anticipates if earlier.'") (quoting *Schering Corp. v. Geneva Pharms., Inc.*, 339
F.3d 1373, 1379 (Fed. Cir. 2003)).

Judgment as a matter of law is properly granted if no "reasonable juror could arrive at a verdict in [the plaintiff's] favor" on its legal claims, or against a defendant on its affirmative defenses. *McNair v. City of Cedar Park*, 993 F.2d 1217, 1219 (5th Cir. 1993); *see also Old Town Canoe Co. v. Confluence Holdings Corp.*, 448 F.3d 1309, 1311-12 (Fed. Cir. 2006). To avoid judgment as a matter of law, i4i must have introduced at trial "substantial evidence" in support of each legal element of its own claims. *Am. Home Assurance Co. v. United Space Alliance*, 378 F.3d 482, 487 (5th Cir. 2004). "Substantial evidence" is "more than a mere scintilla. It means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion." *Eli Lilly & Co. v. Aradigm Corp.*, 376 F.3d 1352, 1363 (Fed. Cir. 2004) (quoting *Consol. Edison Co. v. NLRB*, 305 U.S. 197, 229 (1938)).

B.   Standards for New Trial Under FED. R. CIV. P. 59

Pursuant to FED. R. CIV. P. 59, a court may grant a new trial "on all or some of the issues" where the moving party establishes that "the verdict is against the weight of the evidence," or there were "substantial errors in admission or rejection of evidence or instructions to the jury." *Montgomery Ward & Co. v. Duncan*, 311 U.S. 243, 251 (1940); *Smith v. Transworld Drilling Co.,* 773 F.2d 610, 612-13 (5th Cir. 1985).[7] In deciding a motion for a new trial, in contrast to one for judgment as a matter of law, the district court need not conclude that the jury's verdict is not supported by substantial evidence. Rather, the law in the Fifth Circuit is clear that the district court has broad discretion to weigh the evidence, and "a verdict can be against the 'great weight of the evidence,' and thus justify a new trial, even if there is substantial evidence to support it." *Rousseau v. Teledyne Movible Offshore, Inc.*, 812 F.2d 971, 972 (5th Cir. 1987).

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[7] Determination of a Rule 59 motion for a new trial is a procedural question not unique to patent law and, as such, is governed by the law of the Fifth Circuit. *Immunocept, LLC v. Fulbright & Jaworski, LLP*, 504 F.3d 1281, 1289 (Fed. Cir. 2007) (noting that the Federal Circuit uses the law of the regional circuit to review denial of a Rule 59 motion); *Univ. of W. Va. v. VanVoorhies*, 342 F.3d 1290, 1294 (Fed. Cir. 2003) (holding that denial of a Rule 59 motion "is a purely procedural question not unique to patent law").

C.   **Standards for Determining Literal Infringement**

Determining whether a patent is literally infringed is a two-step process. First, the Court

determines the proper construction and scope of the claims as a matter of law. *Markman v.*

Westview Instruments, 52 F.3d 967, 976 (Fed. Cir. 1995) (en banc), *aff'd* 517 U.S. 370 (1996).

Second, the accused system or method is compared to the properly defined claims to determine

whether the accused system or method falls within the scope of the claims. *Id.*   To prove

infringement, the patentee must show that the accused system or method has every limitation

either literally or by an equivalent. *Wiener v. NEC Elecs., Inc.*, 102 F.3d 534, 540-41 (Fed. Cir.

1996).

To establish literal infringement, i4i was required to prove that <u>every limitation</u> (*i.e.*,

every element or separate requirement) set forth in <u>each asserted claim</u> was met <u>exactly</u>.

Southwall Techs. v. Cardinal IG Co., 54 F.3d 1570, 1575 (Fed. Cir. 1995). Moreover, because

each of the remaining asserted claims is a method claim, i4i was required to prove direct

infringement of <u>each and every step</u> of the claimed process or method. *Canton Bio-Medical, Inc.*

v. Integrated Liner Techs., Inc., 216 F.3d 1367, 1370 (Fed. Cir. 2000).

D.   **Standards for Determining Infringement Under the Doctrine of Equivalents**

A finding of infringement under the doctrine of equivalents requires a showing that the

difference between the claimed invention and the accused product or method is insubstantial or

that the accused product or method performs substantially the same function in substantially the

same way with substantially the same result as <u>each claim limitation</u> of the patented product or

method. *AquaTex Indus. v. Techniche Solutions*, 479 F.3d 1320, 1326 (Fed. Cir. 2007). The

"function/way/result" inquiry focuses on "an examination of the claim and the explanation of it

found in the written description of the patent." *Id.* at 1326; *see also Warner-Jenkinson Co. v.*

Hilton Davis Chem. Co., 520 U.S. 17, 40 (1997).   Judgment as a matter of law of no

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infringement under the doctrine of equivalents is appropriate where a reasonable jury could not find that the differences between a claim limitation and the accused product's asserted equivalent are insubstantial. *Moore U.S.A., Inc. v. Standard Register Co.*, 229 F.3d 1091, 1106 (Fed. Cir. 2000).

The Federal Circuit has held that conclusory statements by an expert on an issue for which a patentee has the burden of proof are insufficient to avoid judgment as a matter of law. *See Texas Instruments Inc. v. Cypress Semiconductor Corp.*, 90 F.3d 1558, 1567 (Fed. Cir. 1996). By the same token, in the context of proof of infringement under the doctrine of equivalents, "[g]eneralized testimony as to the overall similarity between the claims and the accused infringer's product or process will not suffice." *Id.* Rather, for a patentee to survive a motion for judgment as a matter of law, it must provide particularized testimony and linking argument as to the "insubstantiality of the differences" between the claimed invention and the accused device or process, on a limitation-by-limitation basis. *Id.*

III.   STATEMENT OF ISSUES PRESENTED

1.   Whether i4i has presented legally sufficient evidence to support the jury's verdict that use of the accused functionality in Word 2003 or Word 2007 infringes the asserted claims under the Court's constructions?

2.   Whether i4i has presented legally sufficient evidence to support the jury's verdict that use of the accused functionality in Word 2003 or Word 2007 infringes the asserted claims under Microsoft's proposed construction?

3.   Whether a new trial is warranted in view of the jury's verdict of infringement being against the great weight of the evidence and further in view of errors in claim construction?

IV.   ARGUMENT

Microsoft's present motion for judgment as a matter of law of noninfringement is premised on i4i's failure to present legally sufficient evidence for a reasonable jury to find that use of the accused functionality in Word 2003 or Word 2007[8] satisfies every limitation of claims 14, 18 or 20 of the '449 patent, literally or under the doctrine of equivalents. Specifically, i4i's infringement allegations under the Court's claim construction fail for at least two reasons:

1. i4i has not presented legally sufficient evidence for the jury to find that Word 2003 or Word 2007 create a "metacode map" that is "a data structure" according to the Court's claim construction; and

2. i4i has not presented legally sufficient evidence for the jury to find that Word 2003 or Word 2007 create a metacode map that contains the metacodes (as opposed to merely a portion of the metacodes).

Either of these grounds is sufficient to grant Microsoft's present motion for judgment as a matter of law as to all of the asserted claims. Microsoft first addresses each of these grounds under literal infringement, then also demonstrates why resort to the doctrine of equivalents cannot salvage i4i's case.

Microsoft additionally argues that, if errors in the Court's construction of several terms were corrected, this would provide an additional basis for overturning the jury's verdict of infringement and granting at least a new trial.

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[8] Only certain versions of Word 2003 are at issue in this case—namely, the version of Word within Office 2003 Professional and the Word 2003 stand-alone version. i4i has not accused Word in the small business, standard, or student/teacher editions of Office 2003. [Trial Tr. (5/12/09 p.m.) at 55-56 (Rhyne)] i4i has accused all editions of Word 2007. i4i also insisted that it did not seek damages for any uses by individuals as opposed to "businesses." [Trial Tr. (5/13/09 p.m.) at 52 (Wagner)] This argument appears to have been solely for emotional appeal to the jury, as i4i presented no technical basis for this distinction. Nevertheless, i4i is now estopped from seeking damages based on use by non-business users.

A.   i4i Has Not Presented Legally Sufficient Evidence To Support a Jury Verdict That Word 2003 or Word 2007 Create a "Metacode Map"

1.   The Court Construed "Metacode Map" as "a Data Structure"

i4i failed to adduce sufficient evidence for the jury to find that Word 2003 or Word 2007 create a metacode map that is "a data structure," as required by the Court's construction. This requirement of the claims was an issue that was disputed by the parties during claim construction. i4i attempted to have the Court construe the term "metacode map" to be any "plurality of metacodes and their addresses of use corresponding to a mapped content." [Dkt. No. 78 at 5] Microsoft objected to this construction because it did not require the metacode map to be an actual data structure, as uniformly described in the patent. Microsoft pointed out that a "metacode map" is not just metacodes and their addresses of use, but is an actual data structure containing them. [Dkt. No. 85 at 12-13] i4i disagreed, and urged the Court to not require that the map be a data structure, presumably so it could later argue (as it ultimately did) that any plurality of metacodes with related addresses of use that i4i might locate in the accused products could constitute a "metacode map." The Court rejected i4i's argument. [Dtk. No. 111]

i4i made an end-run around this Court's construction at trial by insisting that multiple data structures are "a data structure" if one can simply follow a trail from one to the next, no matter how convoluted or indirect the trail may be.[9] But accepting Dr. Rhyne's theory of "related" data structures would require invalidating the patent claims, because the "content" structure excluded by Dr. Rhyne is just as "related" as the other structures included in Dr. Rhyne's aggregate "metacode map." Because the jury's verdict of infringement necessarily

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[9] In so doing, Dr. Rhyne essentially opined that any metacodes and addresses of use that are found, so long as they are "physically or logically related," form "a data structure" and therefore are a "metacode map." In a nutshell, Dr. Rhyne more or less agreed that "everything's a data structure." [Trial Tr. (5/13/09 a.m.) at 77:16-23] i4i's convoluted, aggregate approach effectively reads the "data structure" requirement out of this Court's construction of metacode map, and should be rejected.

required the jury to accept this implausible theory, the verdict should be set aside and judgment

as a matter of law in favor of Microsoft is warranted.

2. No Reasonable Jury Could Find that Word 2003 or Word 2007 Create a "Metacode Map" as "a Data Structure"

i4i's infringement theory regarding the "metacode map" limitation is based on Dr.

Rhyne's opinion that, viewed from a "higher level," at least seven structures in Word 2003 and

Word 2007 "go together to make" what he opined to be a "metacode map." [Trial Tr. (5/13/09

a.m.) at 66-67, 92-94 (Rhyne); Trial Tr. (5/12/09 p.m.) at 101 (Rhyne)] Excerpted below from

Figure 12 to Dr. Rhyne's report (PX-537) is what Dr. Rhyne labeled at trial as the "map of

metacodes" in Word 2003 and Word 2007. But, as shown below, the alleged "map" does not

actually exist; rather, it consists of "[m]erged structures for display purposes":
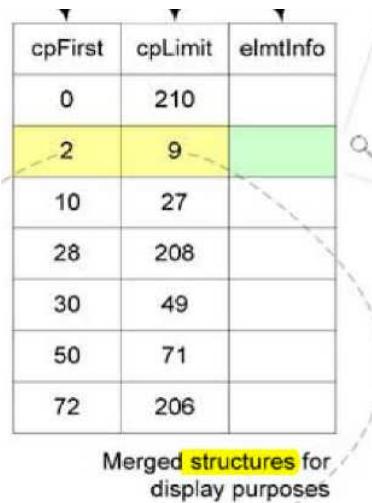
cpFirst	cpLimit	elmtInfo
0	210	
2	9	
10	27	
28	208	
30	49	
50	71	
72	206	

Merged structures for
display purposes

[PX-537 ("structures" highlighting added)][10]

Dr. Rhyne insisted that the seven (or more)[11] data structures that he "linked" together to

meet the "metacode map" limitation are in fact "a data structure" because they are allegedly

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[10] The entirety of PX-537 has been sealed, and Microsoft's inclusion of this excerpt from PX-537 in an unsealed brief does not reflect any waiver of the confidentiality of the entire document.

[11] Dr. Rhyne actually identified on cross-examination eight data structures that he merged together to comprise the metacode map, and further conceded that even that merging of structures was at a high level and did not show additional structures, such as pointer boxes. [Trial Tr. (5/13/09 a.m.) at 73 (Rhyne)]

"linked together as data elements using both physical and logical relationships."   [Trial Tr.

(5/12/09 p.m.) at 156 (Rhyne)] Dr. Rhyne premised his opinion in part on the definition of "data

structure" from the IEEE dictionary:

> **data structure (data management) (software).**
> A physical or logical relationship among data
> elements, designed to support specific data
> manipulation functions. *Syn:* **logical struc-**
> **ture.**   610.5-1990, 610.12-1990

[DTX-2406 at 2406.006 (IEEE Dictionary)] The "relationships" that Dr. Rhyne was referring to

were pointers from one data structure to the next, indexes used by the software to select portions

of still other data structures, and software to identify parts of Word's global data. [Trial Tr.

(5/13/09 a.m.) at 78 (Rhyne)] The use of pointers, indexes, reordering and access to global data

belies the notion that these disparate data structures constitute a "metacode map" as construed by

the Court. [Trial Tr. (5/18/09 p.m.) at 103 (Gray)] Indeed, Dr. Rhyne was even forced to admit

that his amorphous and imprecise definition of a "data structure" would essentially include

everything (except content),[12] a conclusion that can hardly be deemed reasonable or consistent

with the Court's claim construction.

Further, the broad view of "a data structure" urged by Dr. Rhyne is inconsistent with the

teachings of the patent. Specifically, the patent teaches a small, simple data structure; however,

the complex aggregation of multiple data structures advocated by Dr. Rhyne can hardly be

deemed small or simple. [Trial Tr. (5/18/09 p.m.) at 109-111 (Gray)] The purported benefit of

the small, simple data structure taught in the '449 patent is lost during the convoluted selection,

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[12] Trial Tr. (5/13/09 a.m.) at 77 (Rhyne). Dr. Rhyne tacitly perceived a serious invalidity problem if content were included within the "linked" data structures that supposedly constitute the metacode map, given the fundamental requirement of the patent that mapped content be separate from the metacode map. Therefore, when graphically illustrating his view of the linked data structures, Dr. Rhyne took pains to exclude the mapped content. [*See* Plaintiff's Illustrative No. 1 (based on PX-537), which shows an orange line encircling various structures except what is labeled as "mapped content"]

pointing, and indexing of multiple disparate data structures required by Dr. Rhyne's aggregation. [Trial Tr. (5/18/09 p.m.) at 111-112 (Gray)]

i4i failed to adduce legally sufficient evidence to allow a reasonable jury to find that use of the accused functionality in Word 2003 or Word 2007 creates a metacode map as "a data structure," as taught by the patent and required under the Court's claim construction. Judgment as a matter of law of no literal infringement is therefore appropriate.

B.   i4i Has Not Presented Legally Sufficient Evidence To Support a Jury Verdict That Word 2003 or Word 2007 Create a Metacode Map that Contains the Metacodes (as Opposed to Merely a Portion of the Metacodes)

A second problem with i4i's infringement allegations regarding the "metacode map" limitation of the asserted claims is that, even if all of the various data structures identified by Dr. Rhyne in Word 2003 or Word 2007 are somehow merged together and one follows all of the pointers to pointers to pointers, etc., the "treasure" at the end of that convoluted trail is not what is required by the claims. As construed by this Court, the "map of metacodes" recited in the '449 patent claims must contain "a plurality of metacodes." [Dkt. No. 111 at 31] As demonstrated herein, i4i based its infringement allegations on a strained view of "metacodes" that should have been rejected as a matter of law and should never have been considered by the jury.

i4i's infringement theory hinges on whether the "metacodes" in the "metacode map" may omit the "delimiters," which are special characters (such as brackets < > and slashes /) used by a markup language (such as SGML or XML) to differentiate the content of a document from command codes. [Trial Tr. (5/13/09 a.m.) at 44-48 (Rhyne)] These command codes are also referred to in the '449 patent, in the context of an example using SGML, as "tags." [PX-001 at 2:41-54] It is undisputed that tags include delimiters. [Trial Tr. (5/13/09 a.m.) at 54 (Rhyne): "The term tag includes the brackets. There's no question about it."; *see also id*. at 46] It is also undisputed that the data structures identified by Dr. Rhyne as a "metacode map" in Word 2003

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and Word 2007 do not contain <u>tags</u>; at most, they contain <u>tag names</u> (without delimiters). [Trial

Tr. (5/13/09 a.m.) at 105-107, 121 (Rhyne)] Thus, i4i's infringement theory could succeed only

if the '449 patent treated "metacodes" as merely tag names, instead of tags—contrary to the

examples contained in the patent, contrary to arguments made in the file history, contrary to

testimony by at least one of the inventors, contrary to Dr. Rhyne's original infringement report,

and contrary to Dr. Rhyne's testimony about what operates as an "instruction" under the Court's

construction of "metacode."

1.   The Court's Construction of Metacode Map Requires that the Map Contain "Metacodes," Which Are Tags that Include Delimiters

i4i's attempt to construe a "metacode" as corresponding merely to a tag name, instead of

a full tag with delimiters, defied the patent itself and its prosecution history. The Court's

construction of "metacode" as "an individual <u>instruction</u> which controls the interpretation of the

content of the data" came straight from the written description of the '449 patent, which provides

that statement, and then continues by clarifying: "*i.e.*, it <u>differentiates the content</u>." [PX-001 at

4:14-17 (emphasis added)]

i4i has agreed that delimiters are essential to differentiate metacodes from content. For

example, i4i expressly noted during claim construction that the "delimiter characters … define

the start and end of a metacode." [Hrg. Tr. (2/28/08) at 50:15-16] i4i also conceded this during

trial. In particular, Dr. Rhyne specifically conceded that "if it doesn't have the brackets, then it's

not identifiable as a metacode." [Trial Tr. (5/13/09 a.m.) at 48 (Rhyne)] Dr. Rhyne further

agreed that the purpose of the delimiters is to "detect and identify and differentiate the metacodes

from the content": "It reads the input content stream and looks for these little symbols in order

to detect and identify and differentiate the metacodes from the content. It recognizes that these

little brackety things are there, that that [sic] says member ID." [Trial Tr. (5/12/09 p.m.) at 132

(Rhyne); *see also* Trial Tr. (5/13/09 a.m.) at 47 (Rhyne): "You have to have the brackets to be

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able to distinguish the fact that the tag name is present; it's not ordinary text."; Trial Tr. (5/13/09 a.m.) at 51-52 (Rhyne)]

Despite this concession, Dr. Rhyne insisted that the parties still had a "difference of opinion" over the issue of infringement. [Trial Tr. (5/13/09 a.m.) at 48 (Rhyne)] In particular, Dr. Rhyne asserted that even though the delimiters are essential to differentiate the metacodes from regular text, they do not perform part of the function of controlling "the interpretation of the content of the data," as set forth in this Court's construction of "metacodes." [*Id*. at 47-48, 126] Dr. Rhyne illogically based this opinion on the fact that all tags include delimiters. [Trial Tr. (5/13/09 a.m.) at 47 (Rhyne)] This fact hurts rather than helps i4i's position, however, as it confirms that delimiters are necessary to define metacodes as instructions rather than merely content. Even Dr. Rhyne was ultimately forced to admit that he was "not in a position to disagree" with the fact that the "XML spec also recognizes that it's the tag which controls the interpretation of the content." [Trial Tr. (5/13/09 a.m.) at 49 (Rhyne) (emph. added)] The inescapable impact of this admission is that if there are no delimiters in an XML input file, then there are no "individual instructions that control the interpretation of the content of the data." The file would contain only content and nothing recognizable as a "metacode." The equivocal nature of Dr. Rhyne's trial testimony on whether metacodes are the "tags" as opposed to merely the "tag names" (without delimiters) stands in contrast to Dr. Rhyne's clear admission on what operates as an instruction.

Dr. Rhyne's hedging is further undermined by his concession that, in his original expert report, he repeatedly referred to metacodes as "tags" instead of just "tag names." [Trial Tr. (5/13/09 a.m.) at 53-55: "Q: So there [12/8/08 Report at p. 8] you're specifically saying that tags are metacodes. A. I certainly said that." (Rhyne)] Dr. Rhyne tried to dismiss the

inconsistency by noting that he wrote his report before he realized that this was an infringement issue. [Trial Tr. (5/13/09 a.m.) at 143-144 (Rhyne)]

But Dr. Rhyne had it right the first time, because the '449 patent also treats tags, rather than tag names, as metacodes. By way of an example, the '449 patent describes use of a markup language called "SGML," which uses "start tags" and "end tags" to "mark portions of content." [PX-001 at 2:41-54] In the only example disclosed (see below), the patent further provides a graphical example of a metacode map, which contains full tags and not just tag names:

	Metacode Map	
Element Number	Element	Character Position
1	<Chapter>	0
2	<Title>	0
3	</Title>	23
4	<Para>	23
5	</Para>	39
6	</Chapter>	46

[PX-001 at col. 10][13] Dr. Rhyne attempted to discount this teaching as merely the "preferred embodiment." [Trial Tr. 5/13/09 a.m. at 50-51] Dr. Rhyne further attempted to argue that the patent did refer to tag names as metacodes in the following portion of the patent specification:

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[13] The inventors' inclusion of delimiters in the "metacode map" shown in the '449 patent stands in contrast to Mr. Vulpe's earlier, less formal disclosure, in which he provided examples of maps, which did not include delimiters. [*See* PX-595 (2/14/94 fax from Vulpe to Barlow)] The inclusion of delimiters in the metacode map shown in the '449 patent thus appears to have been intentional and likely aimed at providing a more accurate disclosure of the claimed invention.

> Standard Generalized Markup Language, or SGML, is another standard which is gaining widespread use. It is defined in ISO Standard#8879. SGML is a highly structured set of characters which are used to mark portions of content. By convention SGML uses the '<' and the '>' or angle bracket characters as delimiters for tags which are outside the content. For example in a stream of characters like this: "the major <kword>industry</kword> in Canada is", the <kword> and </kword> are used to mark the beginning and end of a section of content which is to be treated as a "kword". The meaning of "kword" is up to the interpreter. SGML specifies rules for insertion of tags into the content stream and how tags are to be differentiated from the content.

[PX-001 at 2:41-54] Dr. Rhyne asserted that because this excerpt from the specification stated that the meaning of "kword" (without delimiters) is "up to the interpreter," this means that the patent is using tag names as metacodes. [Trial Tr. (5/13/09 a.m.) at 126-27 (Rhyne)] This illogical reading of the quoted text is insupportable. In fact, the patent specification is applying the SGML standard, and specifically notes that "<kword> and </kword> are used to mark the beginning and end of a section of content which is to be treated as a 'kword.'" In other words, the full tags, <u>with delimiters</u>, are needed to mark and thus control the interpretation of the content. This concept is further confirmed by reference to the SGML Standard cited in the patent:

> Each generic identifier (GI) is delimited by a less-than symbol (<) if it is at the start of an element, or by less-than followed by solidus (</) if it is at the end. A greater-than symbol (>) separates a GI from any text that follows it.[1]) The mnemonics P, Q, OL, and LI stand, respectively, for the element types paragraph, quotation, ordered list, and list item. The combination of the GI and its delimiters is called a "start-tag" or an "end-tag", depending upon whether it identifies the start or the end of an element.

[PX-131 at 0131.073 (International Standard ISO 8879 "Information Processing – Text and office systems – Standard Generalized Markup Language (SGML)," First ed. 1986-10-15) (highlighting added); *see also* Trial Tr. (5/13/09 a.m.) at 41-43, 46, *see also id.* at 147-148 (Rhyne) (discussing tags in XML)]

Dr. Rhyne's equivocation over the teachings of the patent is also refuted by the prosecution history of the '449 patent. During prosecution, the examiner rejected the claims over

a prior patent issued to Kugimiya, stating that "Kugimiya teaches the claimed metacodes as tags,

separating the tags from the words, locating and addressing them into a mapping table … ."

[PX-004 at 0004.108] In response, the applicants did not disagree that metacodes are tags, but

attempted to distinguish Kugimiya on the basis that Kugimiya stored the metacodes only

temporarily instead of "persistently." [*Id*. at 0004.121; *see also* Trial Tr. (5/15/09 p.m.) at 67

(Vulpe)]

Finally, still further confirmation that metacodes are tags came from one of the named

inventors himself—Stephen Owens—who was i4i's very first witness at trial.   Mr. Owens

testified unequivocally that metacodes are tags:

> Q. Okay. So an <u>SGML tag is a metacode within the meaning of your patent</u>, fair?
> A. <u>Yes, sir</u>.

[Trial Tr. (5/11/09 p.m.) at 141 (Owens) (emph. added); *see also id.* at 100: "[W]e talked about

those tags, which are called metacodes in the patent. And here in the <u>metacode map</u>, you see a

list of all the same <u>tags</u> that were in the second document.") (emph. added); *id*. at 96] Another

i4i witness, Keith Thomas, similarly agreed that an "XML tag" may be referred to as a

"metacode." [Trial Tr. (5/13/09 a.m.) at 55 (Thomas)]

Thus, the evidence compels the conclusion that "metacodes" in the '449 patent claims are

also "tags," which i4i has conceded include delimiters.

2.   No Reasonable Jury Could Find That Word 2003 or Word 2007 Create a "Metacode Map" That Contain Metacodes

The significance of the absence of delimiters from the alleged "metacode map" in Word

2003 and Word 2007 was summed up by Dr. Rhyne himself at trial: "If the jury were to decide

or the Court were to direct that the metacode had to have those little symbols, then, <u>literally, they

are not there.</u>"   [Trial Tr. (5/13/09 a.m.) at 40 (Rhyne) (emph. added)]   Dr. Rhyne further

conceded that "if a tag includes the brackets and that is what the jury feels is the appropriate

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definition of metacode, then the tags would have to be included within the metacode," in which case Dr. Rhyne agreed that the jury should find no infringement. [*Id*. at 144]

Dr. Rhyne is correct on this point. In contrast to the invention purportedly disclosed and claimed in the '449 patent, the Word 2003 and Word 2007 data structures alleged to be a metacode map do not contain metacodes. Dr. Rhyne in fact admitted that even all of the data structures he "merged together" to try to satisfy the "metacode map" limitation do not contain tags—at most, they contain the tag <u>names</u>. [Trial Tr. (5/12/09 p.m.) at 105 (Rhyne) ("And this list, which is created by Microsoft Word 2007, has all of the metacodes, tag names, including member ID."); PX-537][14]

In short, the absence of XML tags in the alleged composite of multiple structures that i4i labels a "metacode map" in Word 2003 and Word 2007 is fatal to i4i's claim of infringement. No reasonable jury could find that use of the accused custom XML functionality in Word 2003 or Word 2007 infringes the metacode map limitation. The jury's verdict of infringement should be set aside, and judgment as a matter of law of noninfringement should be entered in favor of Microsoft.

C.   No Reasonable Jury Could Find Infringement of Claims 14, 18 or 20 Under the Doctrine of Equivalents

Not only is the jury's finding of literal infringement insupportable, but no reasonable juror could have allowed i4i to fill the deficiencies in its proof of literal infringement of the "metacode map" limitation by resorting to the doctrine of equivalents. The only claim limitation on which i4i even attempted to put forth an "equivalents" argument was the "metacode map" limitation—specifically with regard to the issue of "a data structure"—and the only "evidence"

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[14] In fact, Dr. Rhyne's testimony was that the "structure" he calls a "metacode map" actually does not contain even the tag names, but contains a "pointer" to yet another structure. [Trial Tr. (5/12/09 p.m.) at 102-103 (Rhyne) (referring to "magnifying glass" depicted on PX-537, which "points to another unlabeled location"); Trial Tr. (5/13/09 a.m.) at 38-39 (Rhyne)]

put forth by i4i on that point was the testimony of i4i's designated expert, Dr. Rhyne, which was thin and conclusory at best.[15]

The Federal Circuit has admonished that "[t]he doctrine of equivalents is not a talisman that entitles a patentee to a jury trial on the basis of suspicion; it is a limited remedy available in special circumstances, the evidence for which is the responsibility of the proponent." *Schoell v. Regal Marine Indus., Inc*., 247 F.3d 1202, 1210 (Fed. Cir. 2001). Where an expert follows his literal infringement analysis with a conclusory statement that there is also infringement under the doctrine of equivalents, the remedy is not available. *Motionless Keyboard Co. v. Microsoft Corp.*, 486 F.3d 1376, 1382-83 (Fed. Cir. 2007) (noting that "the patentee has the burden to present particularized evidence that links the accused products to the patent on a limitation by limitation basis"); *AquaTex*, 479 F.3d at 1329 (holding that "lawyer argument and generalized testimony" were insufficient to avoid summary dismissal of equivalents claim); *Zelinski v. Brunswick Corp*., 185 F.3d 1311, 1317 (Fed. Cir. 1999) (affirming the district court's grant of Brunswick's motion for summary judgment of noninfringement under the doctrine of equivalents because the only evidence submitted by patentee was a conclusory statement by a patent law expert).

Dr. Rhyne's testimony fell far short of meeting the Federal Circuit's requirements that such testimony be "particularized" and provide linking argument as to the "insubstantiality of the differences" between the claimed invention and the accused device or process, or with respect to the "function/way/result" test. *Texas Instruments*, 90 F.3d at 1567. Dr. Rhyne provided merely a conclusory statement that the differences between a metacode map consisting of multiple data

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[15] Dr. Rhyne did not offer at trial any opinions on infringement under the doctrine of equivalents except as to whether the "metacode map" limitation may be met equivalently by a multiple data structures as opposed to a single data structure. Therefore, the jury could not have considered an equivalents analysis as to any other limitations.

structures versus "a data structure" were "insubstantial."   [Trial Tr. (5/12/09 p.m.) at 161-62

(Rhyne)]   Dr. Rhyne's "opinion" on this issue is a classic example of a thin and conclusory

statement:

> So if the jury were to consider that that's really not a high-level data structure
> made up admittedly by smaller data structures, but you've got to count all seven
> of them, I still think that's a single data structure, because that's what a data
> structure is. It's a structure that holds data in a way that you can understand it.

[Trial Tr. (5/12/09 p.m.) at 162 (Rhyne)]   Indeed, Dr. Rhyne's statement is circular and

confusing at best.   Dr. Rhyne also provided no analysis on direct examination under the

function/way/result test—that is, whether the accused functionality in Word 2003 or Word 2007

performed the same function, in substantially the same way, to perform substantially the same

result as the "metacode map" limitations in the '449 patent claims.   Dr. Rhyne also offered no

quantitative evidence on substantiality.   On cross examination, however, Dr. Rhyne, agreed that

the "result" under the function/way/result test would be the ability to manipulate the metacodes

independently from the mapped content:

> Q.   And in terms of function, way, and result, the result that's achieved
> by that way is the ability to manipulate the metacodes without touching the
> content, right? That's what the patent teaches?
> A.   You asked -- they work together, but that you could go into either
> area and manipulate the metacodes or to manipulate the mapped content.
>   You can -- you can move either one of them, and you personally don't
> have to touch them.
> Q.   You don't have to touch the one you're not trying to --
> A.   Right. It will be affected, but you don't have to touch it yourself.
> Q.   And that's the result of the function-way-result analysis?
> A.   That's correct.

[Trial Tr. (5/13/09 a.m.) at 95:1-16 (Rhyne)]   i4i's other designated technical expert, Dr. Martin,

confirmed that Word 2003 and Word 2007 do not achieve this "independent manipulation" result

when he agreed that, in Word 2003 and 2007, a custom XML tag cannot be added or deleted

without also having access to the mapped content because anchor characters must be added into

(or deleted from) the mapped content:

A. …   In order to insert a Custom XML tag, you need to make room in the SDT bookmark table. In addition, you need to add some anchor tags -- some anchor characters, I should say, to the CP stream.

***

Q.   And you also have to access the – what has been called the mapped content to take out those anchor characters; is that right?

A.   That's correct, yes sir.

[Trial Tr. (5/13/09 p.m.) at 42:2-6, 42:19-22 (Martin)]

Thus, if anything, the vague and conclusory expert testimony proffered by i4i at trial established that Word 2003 and Word 2007 <u>cannot</u> satisfy the "metacode map" limitation equivalently because, at a minimum, Word 2003 and Word 2007 do not achieve substantially the same result as the claimed invention—they achieve the opposite. The jury's verdict of infringement cannot be sustained under the doctrine of equivalents.

D.   In the Alternative, a New Trial Is Warranted

If the Court were to determine that judgment as a matter of law is not warranted on any of the foregoing issues, it should grant a new trial on those issues as the jury's verdict of infringement was against the great weight of the evidence. In the event that the Court grants judgment as a matter of law, but that grant were to be reversed on appeal, Microsoft also moves conditionally for a new trial on any such issue for the same reasons.

In addition, when liability is argued to the jury on alternative legal theories, one of which is not legally correct or is not a permissible jury question, a general verdict of liability cannot stand, lest it have been based on the incorrect or impermissible theory. *See, e.g., Sunkist Growers, Inc. v. Winckler & Smith Citrus Prods. Co.*, 370 U.S. 19, 29-30 (1962). Thus, a successful challenge to the doctrine of equivalents, for example, would require a new trial, in view of the possibility that the jury improperly based its "infringement" verdict on that improper ground. *See Rutherford v. Harris County*, 197 F.3d 173, 185 (5th Cir. 1999) (remanding for new

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trial, noting that "the failure of evidence or a legal mistake under one theory of the case generally

requires reversal for a new trial because the reviewing court cannot determine whether the jury

based its verdict on a sound or unsound theory").

A new trial is also warranted for the additional reason that i4i's allegations of

infringement further cannot be sustained under certain claim constructions offered by Microsoft

during claim construction but not adopted by this Court. [*See* Dkt. Nos. 85, 297 (Microsoft

briefing); 111 (Court's Order)][16] For example, the following constructions were proposed by

Microsoft in conjunction with several claim limitations, but were rejected by the Court:

- o **The claims should be construed to require <u>independent manipulation</u> of the metacode map and mapped content**: This issue was briefed at *Markman* [Dkt. No. 85] and again just before trial [Dkt. No. 297]. The issue is whether the patent claims at issue require the ability to manipulate a metacode map independently from the mapped content of a document. The Court erred in failing to construe the terms "distinct map storage means" and "mapped content storage means" (or "mapped content storage" – claim 20) to require the ability to independently manipulate the metacode map and mapped content.

- o **The claims should be construed to require that the metacode map and the mapped content be stored <u>persistently</u>**: During the claim construction process, Microsoft argued that the same terms involved in "independent manipulation" also require persistently storing the metacode map and the mapped content separately from each other. [*E.g.*, Dkt. No. 85 at 15-21, 24-26] The Court erred in failing to include the requirement of "persistently storing" in its construction of these terms. Rather, the Court limited these terms only to a "portion of memory for storing" metacode map or mapped content. (The notion of "persistently storing" is also in the "compiling" step of claim 14.)

- o **The claims should be construed to require extraction—that is, that the metacodes be <u>separated out</u> from the mapped content**: [*E.g.*, Dkt. No. 85 at 5, 8-11, 26-28] The Court further erred in failing to construe the claims as requiring that the metacodes be <u>separated out</u> from the mapped content.

With regard to the issue of independent manipulation in particular—the evidence

adduced at trial was clear that Word 2003 and Word 2007 do not provide the ability to

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[16] By way of a chart, the jury was instructed according to the Court's claim constructions. Microsoft preserved for appeal all objections to the Court's claim constructions. [Trial Tr. (5/19/09 p.m.) at 10-11]

independently manipulate the metacode map and the mapped content. As noted *supra*, Dr. Martin acknowledged that Word 2003 and Word 2007 do not achieve this "independent manipulation" result when he agreed that, in Word 2003 and 2007, a custom XML tag cannot be added or deleted without also having access to the mapped content because anchor characters must be added into (or deleted from) the mapped content:

> A. …   In order to insert a Custom XML tag, you need to make room in the SDT bookmark table. In addition, you need to add some anchor tags -- some anchor characters, I should say, to the CP stream.
> ***
> Q.   And you also have to access the – what has been called the mapped content to take out those anchor characters; is that right?
> A.   That's correct, yes sir.

[Trial Tr. (5/13/09 p.m.) at 42:2-6, 42:19-22 (Martin)] In other words, adding or deleting a custom XML tag requires access to and manipulation of both what i4i deems to be the "metacode map" as well as what i4i deems to be the "mapped content." Therefore, if the claims are construed to require the ability to independently manipulate the metacode map and the mapped content—as they should be—then there can be no infringement, as a matter of law.

In short, adopting one or more of Microsoft's proposed claim constructions that were rejected by this Court would render a verdict of infringement in favor of i4i insupportable because none of the evidence of record would support a finding that use of the accused functionality in Microsoft Word 2003 or Word 2007 can satisfy the claims as properly construed. At a minimum, in view of these errors in claim construction, a new trial is warranted.

V.   CONCLUSION: RELIEF REQUESTED

Microsoft requests that this Court grant judgment as a matter of law that use of the accused custom XML functionality in Word 2003 or Word 2007 does not infringe claims 14, 18 or 20 of the '449 patent, either literally or under the doctrine of equivalents. In the alternative, the Court should order that a new trial be held.

DATED: June 4, 2009   /s/ Kevin Kudlac
                                        Matthew D. Powers (Lead Attorney)
                                          CA State Bar No. 104795
                                          matthew.powers@weil.com
                                        WEIL GOTSHAL & MANGES LLP
                                        201 Redwood Shores Parkway
                                        Redwood Shores, CA 94065
                                        Phone: 602-802-3000
                                        Fax: 602-802-3100

                                        Kevin Kudlac
                                          State Bar No. 00790089
                                          kevin.kudlac@weil.com
                                        WEIL, GOTSHAL & MANGES LLP
                                        8911 Capital of Texas Highway, Suite 1350
                                        Austin, TX 78759
                                        Telephone: 512-349-1930
                                        Fax: 512-527-0798

                                        David Lender
                                        admitted pro hac vice
                                          david.lender@weil.com
                                        Paul Torchia
                                        admitted pro hac vice
                                          paul.torchia@weil.com
                                        WEIL, GOTSHAL & MANGES LLP
                                        767 5th Avenue
                                        New York, NY 10153
                                        Telephone: 212-310-8000
                                        Fax: 212-310-8007

                                        Eric Findlay
                                          State Bar No. 00789886
                                          efindlay@findlaycraft.com
                                        FINDLAY CRAFT
                                        6760 Old Jacksonville Hwy Suite 101
                                        Tyler, TX 75703
                                        Telephone: 903-534-1100
                                        Fax: 903-534-1137

                                        **ATTORNEYS FOR DEFENDANT
                                        MICROSOFT CORPORATION**

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<u>CERTIFICATE OF SERVICE</u>

The undersigned certifies that the foregoing document was filed electronically in compliance with Local Rule CV-5(a). As such, the foregoing document was served on all counsel who are deemed to have consented to electronic service. Local Rule CV-5(a)(3)(A). Pursuant to FED. R. CIV. P. 5(d) and Local Rule 5(e), all other counsel of record not deemed to have consented to electronic service were served with a true and correct copy of the foregoing by certified mail, return receipt requested, on this the 4th day of June, 2009.

_____/s/ *Margaret M. Masters*_____
Margaret M. Masters

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